

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

5. Lease Serial No.  
UTU-73903

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No.  
Archy Bench Federal #12-4

9. API Well No.  
43047-39715

10. Field and Pool, or Exploratory  
Undesignated

11. Sec., T. R. M. or Blk. and Survey or Area  
Sec. 12, T11S-R22E

12. County or Parish  
Uintah

13. State  
UT

1a. Type of work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator  
McElvain Oil & Gas Properties, Inc.

3a. Address  
1050 17th Street, Suite 1800, Denver, CO  
80265

3b. Phone No. (include area code)  
(303)893-0933

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface 516' FNL & 582' FWL (NWNW) Sec. 12, T11S-R22E S.L.B. & M  
At proposed prod. zone same (vertical well)  
39.880980  
6359534  
44155384  
104.410125

14. Distance in miles and direction from nearest town or post office\*  
Aprox. 21 miles South East of Ouray, Utah

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
516' North Lease Line

16. No. of acres in lease  
1341 acres

17. Spacing Unit dedicated to this well  
40 Acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.  
"C"Topo 1 mile Radius

19. Proposed Depth  
7650 ft

20. BLM/BIA Bond No. on file  
COB-000010 (Nation-Wide Bond)

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
5815' GL

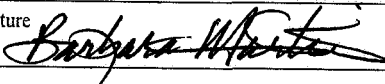
22. Approximate date work will start\*  
10/01/2008

23. Estimated duration  
30 Days Constuction & Drilling

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

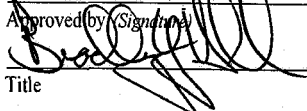
1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature  


Name (Printed Typed)  
Barbara Martin

Date  
10/17/2007

Title  
Engineer

Approved by (Signature)  


Name (Printed Typed)  
BRADLEY G. HILL  
Office  
ENVIRONMENTAL MANAGER

Date  
10-22-07

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

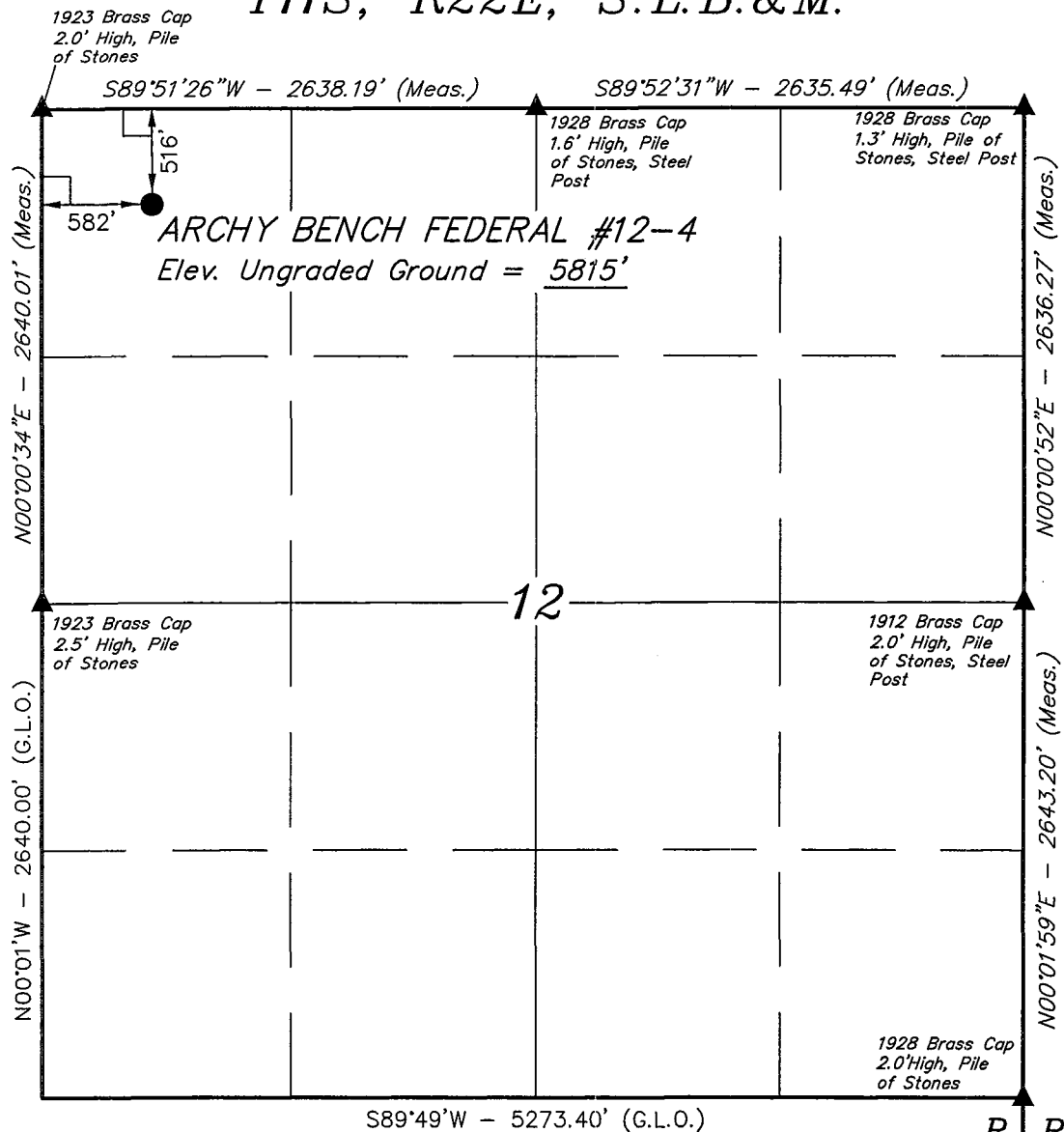
\*(Instructions on page 2)

Federal Approval of this  
Action is Necessary

RECEIVED  
OCT 19 2007

DIV. OF OIL, GAS & MINING

T11S, R22E, S.L.B.&M.



LEGEND:

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)

LATITUDE = 39°52'51.28" (39.880911)

LONGITUDE = 109°24'38.98" (109.410828)

(AUTONOMOUS NAD 27)

LATITUDE = 39°52'51.40" (39.880944)

LONGITUDE = 109°24'36.53" (109.410147)

R  
22  
E

R  
23  
E

McELVAIN OIL & GAS PROP., INC.

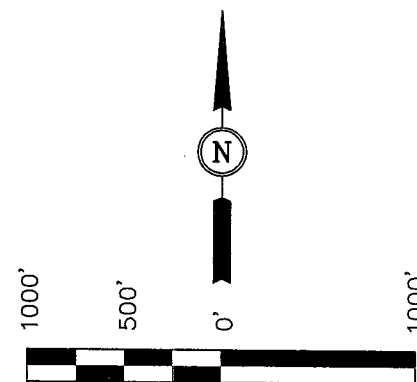
Well location, ARCHY BENCH FEDERAL #12-4, located as shown in the NW 1/4 NW 1/4 of Section 12, T11S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHEAST CORNER OF SECTION 12, T11S, R22E, S.L.B.&M. TAKEN FROM THE BUCK CAMP CANYON, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5973 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
NO. 161348  
ROBERT L. HAY  
REGISTERED LAND SURVEYOR  
REGISTERED IN THE STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 05-22-07	DATE DRAWN: 06-01-07
PARTY M.A. C.F. P.M.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE McELVAIN OIL & GAS PROP., INC.	

## Ten Point Drilling Plan

McElvain Oil & Gas Properties, Inc.

Archy Bench Federal #12-4  
Surface Location NW ¼, NW ¼, Section 12, T11S-R22E, SLB&M  
Uintah County, Utah

### 1. Surface Formation

Uintah

### 2. Estimated Formation Tops and Datum

(Datum Assumes 10' KB above ungraded GLE of 5,815' from sea level = 5,825' KB)

<u>Formation</u>	<u>Top @ Drill Depth</u>	<u>Datum</u>	<u>Anticipated Fluids</u>
Uintah	Surface	+5,825' KB	
Green River	1,775'	+4,050' KB	
Uteland Butte	3,775'	+2,050' KB	
Wasatch	3,875'	+1,950' KB	Gas, Water
Mesaverde	5,875'	-50' KB	Gas, Water
Neslen	7,125'	- 1,300' KB	Gas, Water
Estimated TD	7,650'		

Potential formation objectives include the Uteland Butte, Wasatch and Mesaverde, including the Mesaverde sub-members. Primary objectives will be the Wasatch and Mesaverde.

### 3. BOP and Pressure Containment Data

Formation pressures are anticipated to be normally or slightly under-pressured with a maximum bottom hole pressure of slightly less than 3,330 psi (pressure gradient of less than 0.435 psi/ft).

A 2000-psi WP BOP system as described in 43 CFR 3160 "Onshore Oil and Gas Order #2" will be utilized. The system will consist of a 2,000 psi double ram preventer with one blind, one pipe ram. The system may, depending on the drilling rig's substructure clearance, utilize a rotating head. Please refer to the attached BOP diagram for this 2,000 psi BOP configuration. The kill line and choke manifold will have a 2,000 psi or higher pressure rating. The BOP system, including the surface casing, will be pressure tested following initial installation and prior to drill-out of the surface casing. Pressure tests will be conducted to the minimum standards set forth in "Onshore Oil and Gas Order #2". The BOP will be mechanically checked daily during the drilling operation.

**4. Proposed Hole, Casing and Cementing Data****Hole & Casing Configuration**

<u>Hole Size</u>	<u>Hole Interval</u>	<u>Casing Size</u>	<u>Setting Depth</u>	<u>Casing New/Used</u>
12 1/4"	0 - 765'	9 5/8"	700' - 765'	New
7 7/8"	765' - TD	4 1/2"	T.D.	New

**Casing Properties**

<u>Csg Size</u>	<u>Csg Wt./Ft</u>	<u>Csg Grade</u>	<u>Csg Thread</u>	<u>Csg Collapse</u>	<u>Csg Burst</u>	<u>Csg Tensile</u>
9 5/8	32.3	H-40	ST&C	1,400 psi	2,270 psi	254,000#
4 1/2	11.6	N-80	LT&C	6,350 psi	7,780 psi	267,000#

If used, conductor pipe will be set at approximately 40 feet and have a 14" minimum outside diameter.

**Cement Program**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amount</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
9 5/8"	Premium + 2% CaCL + 0.25 lb/sk. Cello Flake.	410 sacks	1.18 cf/sk	15.6 lbs/gal

*Above surface casing cement volume based upon 75-100% excess for cement to surface*

4 1/2"	<u>Lead</u> (3500'-surface) Premium + 16% Gel + 1% Econolite + 5#/sk Gilsonite + 1.5#/sk Granulite + 0.25#/sk Flocele + 3% Salt	290 sacks	3.81 cf/sk	11.0 lbs/gal
--------	---	-----------	------------	--------------

	<u>Tail</u> (TD to 3500') Premium-AG + 2% Gel + 0.5% Halad(R)-9 + 0.3% CFR-3 + 2% Microbond + 0.1% Super CBL	780 sacks	1.52 cf/sk	14.2 lbs/gal
--	--	-----------	------------	--------------

*Above cement volumes based upon 25% excess, or if accurate caliper log obtained, 15% excess for cement to surface.*

*A stage tool may be run if drilling conditions indicate a two stage job is warranted or if favorable mud log shows and elog responses indicate potential pay in the Uteland Butte or Green River Formation.*

**Float Equipment & Centralizers**

Surface casing will be single staged with guide shoe, 1 joint casing, baffle. A minimum of 3 bow spring centralizers will be run on bottom as follows: Center of shoe joint, top of 1st casing connection & top 2nd casing connection.

Production casing will be single staged with float shoe, 1 joint casing, float collar. A minimum of 3 centralizers will be run on bottom plus additional centralizers run through potential pay zones in the tail cement interval.

**5. Mud Program**

<u>Interval</u>	<u>Mud Type</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./Qt.</u>	<u>Fluid Loss Ml/30 Min.</u>
0 - 765'	Air & Mist			No Control
765' - 3,475'	Water	8.4 - 8.8	28 - 36	No Control
3,475 - 7,650' (TD)	Water/Gel	8.8 - 9.4	32 - 42	8 - 10

*Unless hole conditions dictate otherwise, mud-up is anticipated to start approximately 300' above the Uteland Butte formation. Visual mud monitoring will be used.*

**6. Testing, Coring, Sampling and Logging Program**

- a) Test: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Sampling: Mud loggers will be scheduled for call-out following drill-out of the surface casing. The rig-up of gas detection equipment and recovery of cuttings samples will start at the bottom of the Green River formation at approximately 3,750' drill depth. Initially, a 30 foot sampling frequency will be scheduled. Depending on drill rates and shows, and at geologist's discretion, sampling frequency may be increased to 10 foot intervals.

## d) Electric Logging:

<u>Type</u>	<u>Interval</u>
Induction-Gamma Ray-Caliper	TD to Surface Casing
Density-Neutron	
Cement Bond Log-Gamma Ray	PBTD to Top of Cement

**7. Abnormal Conditions**

Oil and gas shows are anticipated but no abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered H<sub>2</sub>S. Anticipated formation pressures are expected to be “normally pressured” (0.435 psi/ft) or slightly under-pressured with a maximum bottom hole pressure of slightly less than 3,330 psi. Maximum anticipated surface pressure equals approximately 1,645 psi (Normal pressure gradient less partially evacuated hole gradient times depth: 0.435 psi/ft – 0.22 psi/ft x 7,650’ TD = 1,645 psi).

**8. Anticipated Starting Date & Drilling Schedule**

Location building and well spud is anticipated within 120 days of McElvain’s receipt of an approved drilling permit and conditioned upon lease wildlife stipulations. Duration of location construction, drilling & completion operations is expected to be approximately 55 aggregate days comprised of 7 construction days, 3 days to pre-set surface casing, 2 move-in/rig-up days, 15 drilling days, 2 rig-down/move-out days, 1 location prep day, 20 completion & testing days & 5 battery construction days.

**9. Variances**

Operator requests a variance to regulations requiring a straight run blooie line (when possible, a straight run blooie line will be used).

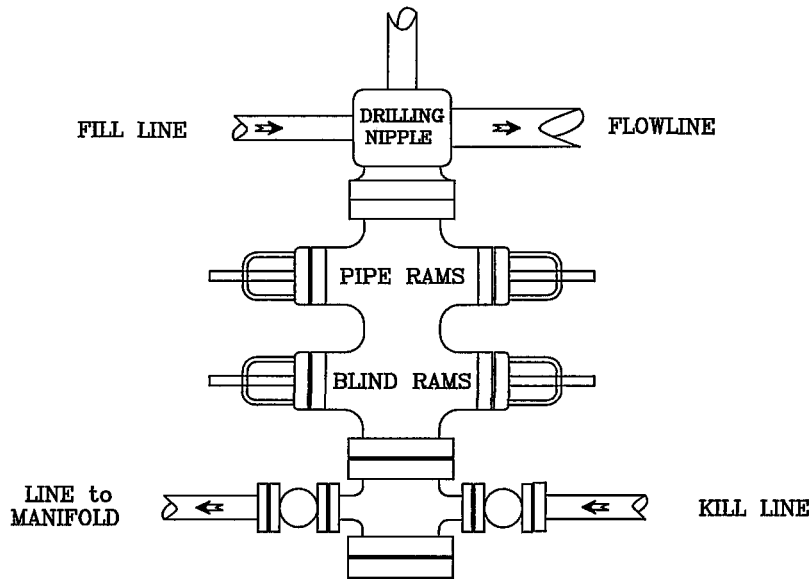
Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line.

**10. Other**

Directional drilling for this location is dismissed in reference to Section 2.5.3 Directional Drilling of the RDG Final EIS. The RDG addresses directional drilling to be eliminated because of technical and economic limits. In brief, it addresses the Mesaverde and Wasatch formations consist of randomly stacked lenticular sand lenses. Most of the target formations are untested zones and directional drilling is expensive to drill. Therefore, drilling vertically through the target zone allows for more favorable economic results.

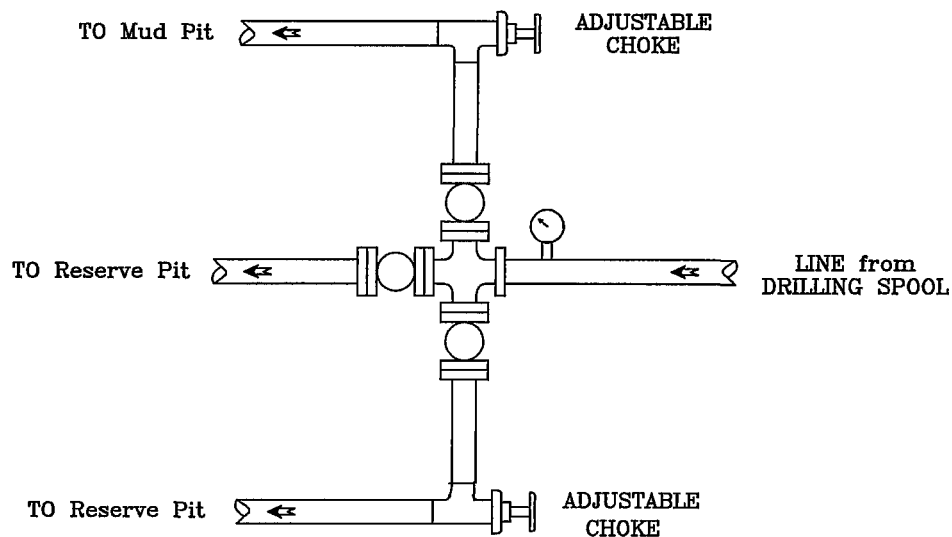
# PRESSURE CONTROL

## Wellhead Assembly



2000 PSI or higher Pressure Rating

## Choke Manifold



*McElvain Oil & Gas Properties, Inc.*

Archy Bench Federal #12-4

**McELVAIN OIL AND GAS PROPERTIES, INC.**

**13 POINT SURFACE USE PLAN**

**Archy Bench Federal #12-4**

**NW ¼ NW ¼**

**SEC. 12, T11S-R22E, S.L.B.&M.**

**UINTAH COUNTY, UTAH**

**LEASE NUMBER: UTU-73903**

**SURFACE MANAGER/OWNER:**

**BUREAU OF LAND MANAGEMENT**



## 1. Existing Roads

To reach the proposed Archy Bench Federal #12-16 well in Section 12, T11S-R22E:

Starting in Vernal, Utah

Proceed in a southwesterly direction from Vernal, Utah along U.S. Highway 40 for approximately 14.0 miles to the junction of State Highway 88.

Exit Left and proceed in a southerly direction approximately 17.0 miles to Ouray, Utah.

Proceed in a southerly, then southeasterly direction on the "Seep Ridge Road" for approximately 11.2 miles to the junction of this road and an existing road to the east.

Turn Left on "Glen Bench Road" (CR #3260) which will turn into CR #4120 and proceed in an easterly then southeasterly direction approximately 9.6 miles to the junction of this road and an existing road to the east.

Turn Left and proceed on CR #4120 in an easterly, then northeasterly direction for approximately 2.6 miles to the junction of this road and an existing road to the northeast.

Turn Left and proceed (still on CR #4120) in a northeasterly, then southerly direction for approximately 0.7 miles to the junction of this road and an existing road to the southeast.

Turn Left (on CR #4140) and proceed in a southeasterly, then northeasterly direction approximately 1.3 miles to the junction of this road and an existing road to the south known as the "Archy Bench Road".

Turn Right on CR #4150 (Archy Bench Road) and proceed in a southerly direction for approximately 2.9 miles to the beginning of the proposed location access lying to the northeast.

Follow the road flags in a North West direction approximately 0.5 miles to the proposed Archy Bench #12-4 well-site location.

Total distance from Vernal, Utah to the proposed well is approximately 61 miles.

All existing roads from Vernal, Utah to proposed access road are State or County Class D roads.

Anticipated construction will occur on approximately 2,640 feet of ON-LEASE access road adjoining and lying slightly southeast of the proposed location.

Please see the attached map B Topo for additional details.

## 2. Planned access road

The proposed location will require approximately 2,640 feet of ON-LEASE new road construction.

The new road will be built to the following standards:

A) Approximate length	2640 Ft.
B) Right of Way width	30 Ft.
Running Surface	18 Ft.
C) Maximum grade	< 5%
D) Turnouts	None
E) Major cuts and fills	None
F) Culvert	None
G) Surfacing material	Native Soil
H) Fence crossing	None
I) Road flagged	Yes
J) Access road surface manager/owner	BLM
K) Pipeline crossing	None
L) Stream crossings	None
M) All new construction on lease	Yes

Please see the attached location Map B Topo for additional details.

Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surfacing Operating Standards for Oil and Gas Exploration and Development, 1989. This is also referred to as the Gold Book.

The road will be constructed to meet the standards of the anticipated traffic flow and all-weather road requirements. Construction shall include ditching, draining, graveling, crowning, and capping the road bed, as necessary, to provide for a well-constructed safe road. Prior to construction, the road shall be cleared of any snow cover and allowed to dry completely. Travel off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type (unless specified differently). Crossings will be constructed so they will not cause "silt-up" or accumulation of debris in the drainage crossing, nor shall the drainages be blocked by the roadbed. Erosion of the drainage ditches by runoff water shall be prevented by diverting water at frequent intervals by utilizing cutouts. Up grading will not be constructed during muddy conditions. Should mud or dust holes develop, they will be filled in and detours around them avoided.

### 3. Location of existing wells

The following wells are located within a one mile radius of the location site.

A) Water well	None
B) Abandoned well	None
C) Temp. abandoned well	None
D) Disposal well	None
E) Drilling/Permitted well	Twelve (AB 11-22-24-1, AB 11-22-12-1, AB 11-22-23-2, AB 11-22-24-2, AB 11-22-22-1, AB 11-22-23-1, AB 11-22-42-1, AB 11-22-33-1, AB 1-7, Bitter Crk 1122-2H, AB 11-22-13-1 & AB 11-22-14-1)
F) Producing well	One (AB State 1-2)
G) Shut in well	None
H) Injection well	None
I) Monitoring or observation well	None

Please see the attached map C Topo for additional details.

### 4. Location of tank batteries, production facilities, and production gathering service lines.

#### A) Production Facility

All production facilities will be contained within the proposed location site. Please see the attached plan for a typical gas well equipment and pipe lay-out.

All permanent structures (on site for six month or longer), constructed or installed, will be painted a flat, non-reflective, earth-tone color to match one of the standard environmental colors. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

If the well is capable of economic production, a gas gathering line will be required.

## B) Gas Gathering Line

We propose to install approximately 2686 feet ON-LEASE of steel gas gathering line if an economic well is drilled and completed. Construction of the gathering line will start at the Archy Bench Federal #12-4 well site location and head East along the Souther edge of the new access road. The pipe line will then continue North East where it will tie into an existing pipeline in Sec. 12, T11S-R22E.

Please see map D for gathering line location.

A portion of the gathering line will require an off lease right-of-way.

The line will be a 3-4" steel line, depending on the anticipated well deliverability.

Max operating pressure will be 500 psi.

The operating temperature of the gathering system will reflect the daily ambient temperature of the area.

At this time, there are no plans for on-site compression or pumping stations.

The gathering line will not be hydrostatically tested.

The pipeline will be laid and utilized above ground, except for where it will cross under the road. The following are reasons for above ground installation:

- A) This area would require blasting to bury the pipeline.
- B) Buried pipeline are subject to corrosion over time which in return requires the pipeline to be dug up for repair and/or maintenance.

Both of these reasons would create additional surface disturbance to bury the pipeline. In addition, when the location is reclaimed the buried pipeline will be required to be dug up and removed. If pipeline is laid above ground it would allow for maintenance and removal with minimal surface disturbance.

The pipe line will be removed when there is no continuing need for this gathering line. Prior to removing the line, an onsite will be held with the BLM to insure that the removal and reclamation will conform to all applicable BLM regulations and requirements.

There will be no additional surface disturbances required for the installation of a gathering line. The pipeline will be welded together and pulled from the well-site location and tie-in points when practical, although it will likely be necessary to utilize small segments of the access road for some of the pipe line welding. The line will then be boomed off to the side of the road.

A gas meter will be located within 500' of the well head. The gas line will be buried or anchored down from the well head to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the production tank(s) strapped in place prior to any sales deliveries from the well. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

## **5. Location and type of water supply**

Water for drilling and cementing the subject well will fresh water and will be trucked by contractor Tu & Frum, Inc. Depending on road conditions, water will be trucked from: Rose Wood Resources flowing water well, Well #5A, in Section 24 T11S-R23E, water permit number 49-1547, and/or Willow Creek, 30 miles southwest of Vernal in Sec. 29, T12S-R21E, permit #T-75377, and/or the White River in Sec. 23, T10S-R23E, permit #T-75517. Completion water will come from the same supply or from the City of Vernal, Utah.

## **6. Source of construction materials**

All construction material for this location site and access road shall be borrowed material accumulated during construction of the location site and access road. Additional road gravels or pit lining material will be obtained from private sources.

## **7. Methods for handling waste disposal**

### **A) Pit construction and liners:**

The reserve pit will be approximately 8 to 10 feet deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

The pit liner will be a nylon reinforced liner. It will be a minimum of 16 mil thickness with sufficient bedding (i.e. weed free straw or hay, felt, or soil) to cover any rocks. Additional pit requirements will specified by the BLM in their "Conditions of Approval". The liner will overlap the pit walls and be covered with dirt and/or rock to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit.

The pit will be used to hold non-flammable materials such as drilling make-up water, drill cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

**B) Produced fluids**

Produced water will be confined to the reserve pit, or if deemed necessary, a steel storage tank will be utilized for water storage for a period not to exceed 90 days after initial production. Produced water accumulated after the initial production and testing period will be stored in steel tank(s) before truck removal to an authorized disposal pit or injection well.

**C) Garbage**

A trash cage fabricated from expanded metal will be used to hold trash on location. All trash will be removed to an authorized landfill location.

**D) Sewage**

A portable chemical toilet will be supplied for human waste during the drilling operation.

**E) Site clean up**

After the drilling and the completion rig is moved off the location, the well site area will be cleaned and all refuse removed.

**F) Hazardous Material Statement**

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing or completion of the well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing or completion of the well.

**8. Ancillary facilities**

There are no ancillary facilities planned at this time and none are foreseen in the future.

**9. Well-site layout and location**

The proposed location has been staked at 516' FNL & 582' FWL of Section 12, T11S-R22E.

Well-site layout

Location dimensions are as follows:

A) Pad length	335 ft	G) Max fill	11.1 ft
B) Pad width	230 ft	H) Total cut yards	9,540 cu. yds.
C) Pit depth	8 – 10 ft	I) Pit location	Southwest
D) Pit length	150 ft	J) Top soil locations	corner 1 & 6
E) Pit width	70 ft	K) Access road location	Southeast side
F) Max cut	18.8 ft	L) Flare pit	Corner C

Please see the attached location diagram for additional details.

The reserve pit will be fenced on three sides during drilling operations. The fourth side will be fenced when the drilling rig is removed from the location. The fence will be maintained until clean-up.

All pits will be fenced according to the following minimum standards:

- A) Thirty-nine inch net wire shall be used with at least one strand of barb wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

#### **10. Plans for restoration of the surface**

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. This stripped top soil will amount to approximately 1,590 cubic yards of material. Topsoil will be stockpiled in two piles. Placement of the topsoil is noted on the attached location plat. The stock piled topsoil will be seeded with the seed mix dictated by the BLM. When all drilling and completion activities have been completed and the pit back-filled, the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the topsoil has been spread. The unused portion of the location will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

A) Producing location

Following the back-fill of the reserve pit, the natural drainage pattern shall be restored, as nearly as practical, to its original line of flow.

All disturbed areas will be re-contoured to the approximate natural contours. Prior to back filling the pit, the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow for proper back filling, the Operator will submit a request for an extension of time. Once initiated, reclamation activities will be completed within 30 days, weather conditions permitting.

If a reserve pit utilizes a liner, the liner shall be turned down below ground level and perforated before the pit is backfilled.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and runoff from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert runoff as needed.

When restoration activities have been completed, the location site shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

a) Seeding dates

Seed will be spread when the topsoil is stock piled and when reclamation work is performed.

b) Seed mix

The seed mix utilized in the soil reclamation will be in the amounts, and of the type specified by the BLM in their "Conditions of Approval".

B) Dry hole/Abandoned location

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and the BLM will attach the appropriate surface rehabilitation conditions of approval.



## 11. Surface Manager/Owner

Location	Bureau of Land Management
Access road	Bureau of Land Management
Pipeline	Bureau of Land Management

## 12. Other information

### A) Vegetation

The vegetation coverage is slight. The predominant existing vegetation consists of sage brush.

### B) Dwellings

There are no known dwellings within 1 mile of this proposed location. An unoccupied storage bin is located approximately  $\frac{3}{4}$  mile to the North West from the location.

### C) Archeology & Paleo

A cultural resource inventory survey was conducted on the proposed well-site location, access road and pipe line route. The archaeological survey was conducted by Montgomery Archaeological Consultants and their State Project Permit No U-07-MQ-0864b. Also, a Paleontological Report was conducted by Intermountain Paleo-Consulting, IPC # 07-156.

During any operations, if archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations which would affect such sites or objects will be suspended and the BLM will be immediately notified.

### D) Water

The nearest live water is White River,  $\pm$  4 miles north-east of the proposed location.

### E) Chemicals

No pesticides, herbicides or other possible hazardous chemicals will be used without AO approval.

### F) Notifications

The Bureau of Land Management will be notified as follows

#### a) Location construction

At least 48 hours prior to construction of location and access roads

- b) Location completion  
24 hours prior to moving the drilling rig on location.
- c) Spud notice  
At least 24 hours prior to well spud.
- d) Casing string and cementing  
At least 24 hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests  
At least 24 hours prior to initial pressure tests.
- f) Abandonment – Newly Drilled Dry Holes and/or Hole Failures  
At least 24 hours prior to start of abandonment operations. In certain situations, Operator may be unable to provide 24 hour advance notice, but in all situations, Operator will receive abandonment orders from the BLM prior to the actual commencement of abandonment operations.
- g) First production notice  
Within 5 business days after the new well begins, or production resumes after well has been off production for more than 90 days.
- h) Completion and Re-completion Operations  
At least 24 hours prior to moving the rig on location.
- i) State of Utah Division of Oil, Gas, and Mining (DOGM) Notifications  
Within 24 hours of well spud, Operator will notify DOGM at 801.538.5284.  
Prior to commencement of operations to plug and abandon the well, Operator will notify DOGM at 801.538.5338.

#### G) Flare pit

The flare pit will be located in corner 6 of the reserve pit and outside the pit fence on the south side of the location. All fluids will be removed from the flare pit within 48 hours of occurrence.

#### H) Wildlife Stipulations

Wildlife stipulations and possible activity restrictions will be detailed in the “Conditions of Approval” received with an approved Permit to Drill. Operator will comply with these wildlife “conditions of approval”.

## I) Onsite

Onsite Date: Thursday, July 12, 2007

## Onsite attendants

Mike Cutler	BLM
Scott Ackerman	BLM
Ivan Sadlier	McElvain Oil & Gas
Barbara Martin	McElvain Oil & Gas

**13. Lessees or Operator's representative(s) and certification**

## A) Representatives

Barbara Martin  
Engineer  
1050 – 17<sup>th</sup> Street, Ste. 1800  
Denver, CO. 80265  
Off. 303.893.0933 xtn 345  
Fax. 303.893.0914  
Cell. 303.718.0812

E-Mail. [barbaram@mcelvain.com](mailto:barbaram@mcelvain.com)

Ivan Sadlier  
Production Foreman  
P.O. Box 985  
Vernal, UT. 84078  
Cell #1: 435.828.0284  
Cell #2: 435.828.0282

E-Mail. [sadlier@easilink.com](mailto:sadlier@easilink.com)

McElvain Oil & Gas Properties, Inc. is considered to be the operator of the subject well. McElvain Oil & Gas Properties, Inc. agrees to be responsible under the terms and conditions of the lease for operations conducted upon the leased premises.

## B) Certification

All lease operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, and approved "Plan of Operation", and any applicable "Notice to Lessees".

The operator will be fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the field representatives to ensure compliance.

Bond coverage for the lease activities is being provided by McElvain Oil & Gas Properties' BLM Nationwide Bond #COB-000010

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route, that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be performed by McElvain Oil and Gas Properties, Inc. and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date Oct. 17, 2007

McElvain Oil & Gas Properties, Inc.

A handwritten signature in black ink, appearing to read "Barbara Martin", written in a cursive style.

Barbara Martin  
Engineer

CULTURAL RESOURCE INVENTORY OF  
MCELVAIN OIL & GAS PROPERTIES, INC'S PROPOSED  
WELL LOCATIONS ARCHY BENCH FEDERAL  
#12-4 AND #12-16 (T11S, R22E, SECTION 12)  
UINTAH COUNTY, UTAH

By:

Nicole Lohman

Prepared For:

Bureau of Land Management  
Vernal Field Office

Prepared Under Contract With:

McElvain Oil & Gas Properties, Inc.  
1050 17<sup>th</sup> Street, Suite 1800  
Denver, Colorado 80265

Prepared By:

Montgomery Archaeological Consultants, Inc.  
P.O. Box 219  
Moab, Utah 84532

MOAC Report No. 07-259

July 23, 2007

United States Department of Interior (FLPMA)  
Permit No. 07-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-07-MQ-0864b

## **Paleontological Reconnaissance Report**

---

**McElvain's Proposed Well Pads, Access Roads and Pipelines  
for "Archy Bench Federal #12-4 & #12-16" (Sec. 12, T  
11 S, R 22 E) & "Hanging Rock Federal #1-1 &  
#1-2" (Sec. 1, T 12 S, R 23 E)**

**Archy Bench, Archy Bench SE & Buck Camp Canyon  
Topographic Quadrangle  
Uintah County, Utah**

July 30, 2007

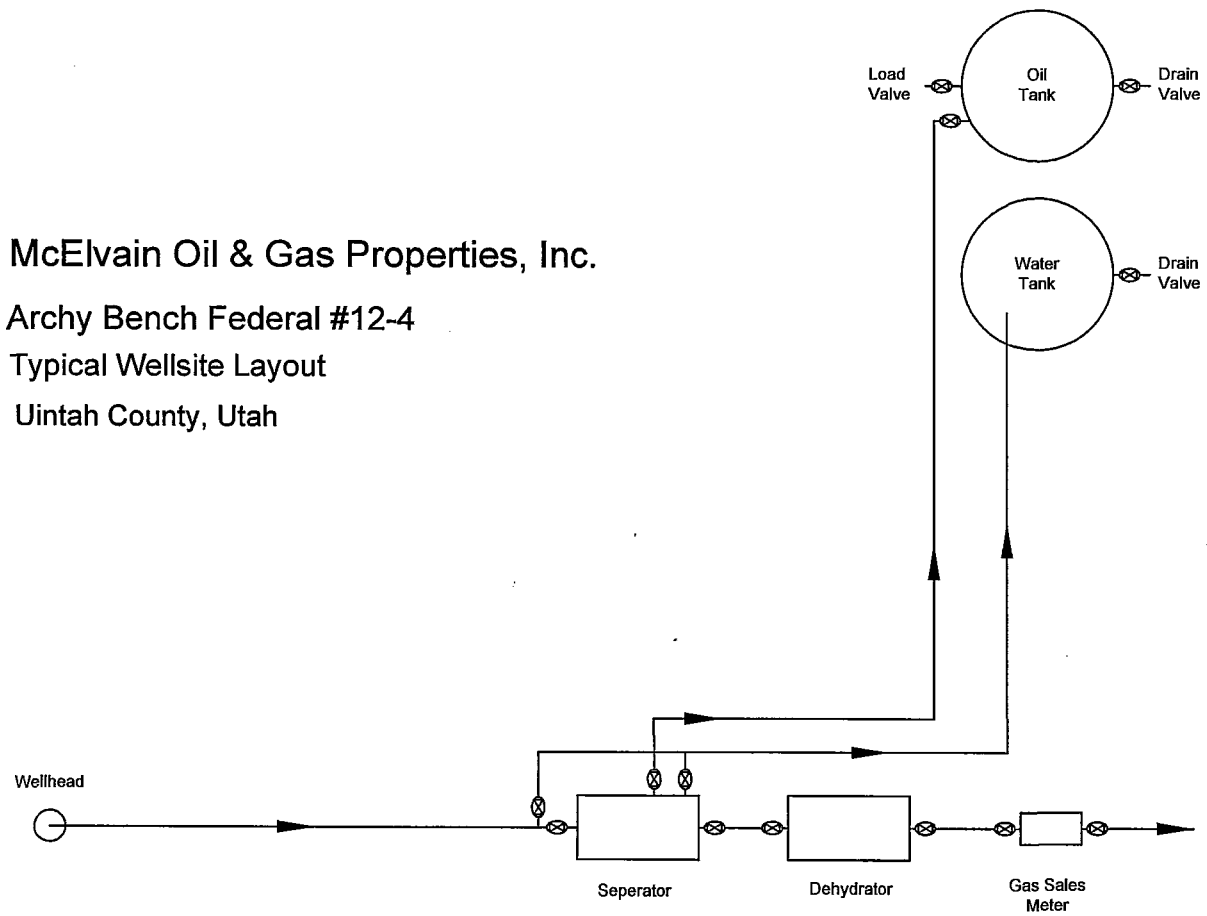
Prepared by Stephen D. Sandau  
Paleontologist for  
Intermountain Paleo-Consulting  
P. O. Box 1125  
Vernal, Utah 84078

McElvain Oil & Gas Properties, Inc.

Archy Bench Federal #12-4

Typical Wellsite Layout

Uintah County, Utah



**McELVAIN OIL & GAS PROP., INC.**  
**ARCHY BENCH FEDERAL #12-4**  
LOCATED IN UINTAH COUNTY, UTAH  
SECTION 12, T11S, R22E, S.L.B.&M.

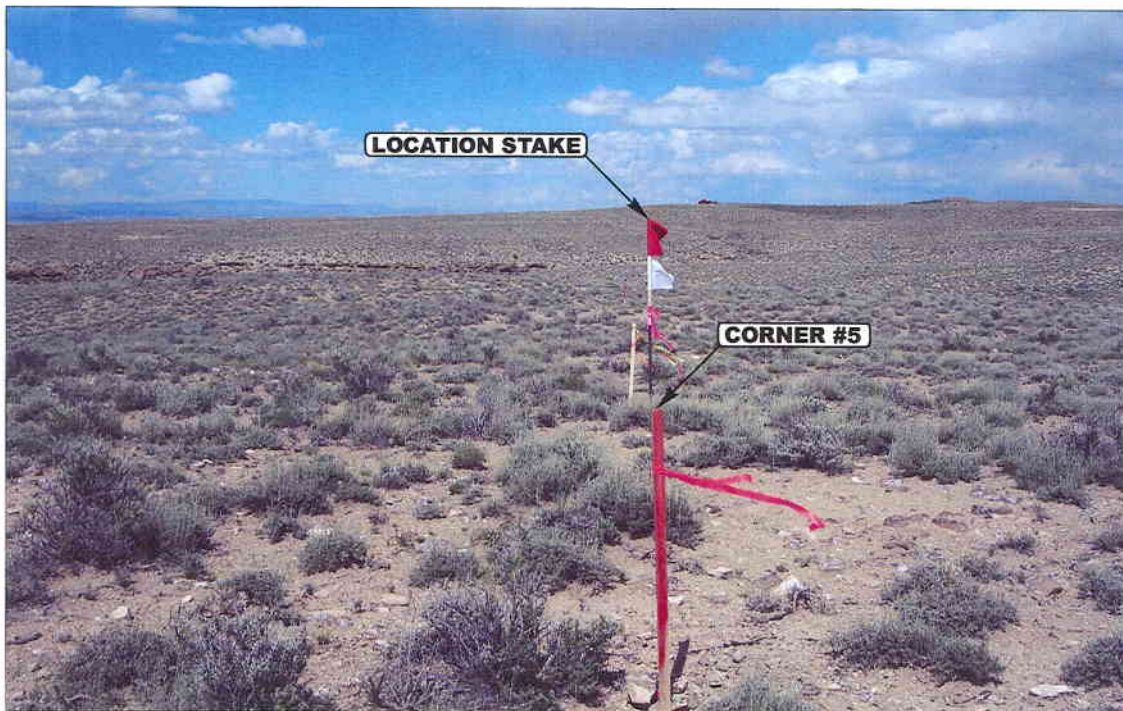


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY



**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

- Since 1964 -

**LOCATION PHOTOS**

**05 23 07**  
MONTH DAY YEAR

**PHOTO**

TAKEN BY: M.A.

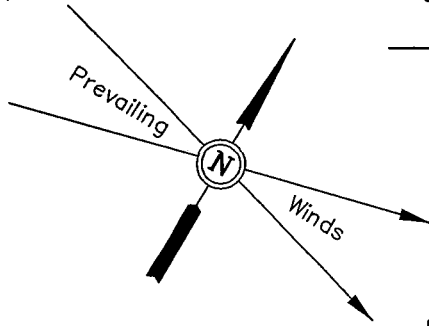
DRAWN BY: B.C.

REVISED: 00-00-00



# M<sup>C</sup>ELVAIN OIL & GAS PROP., INC.

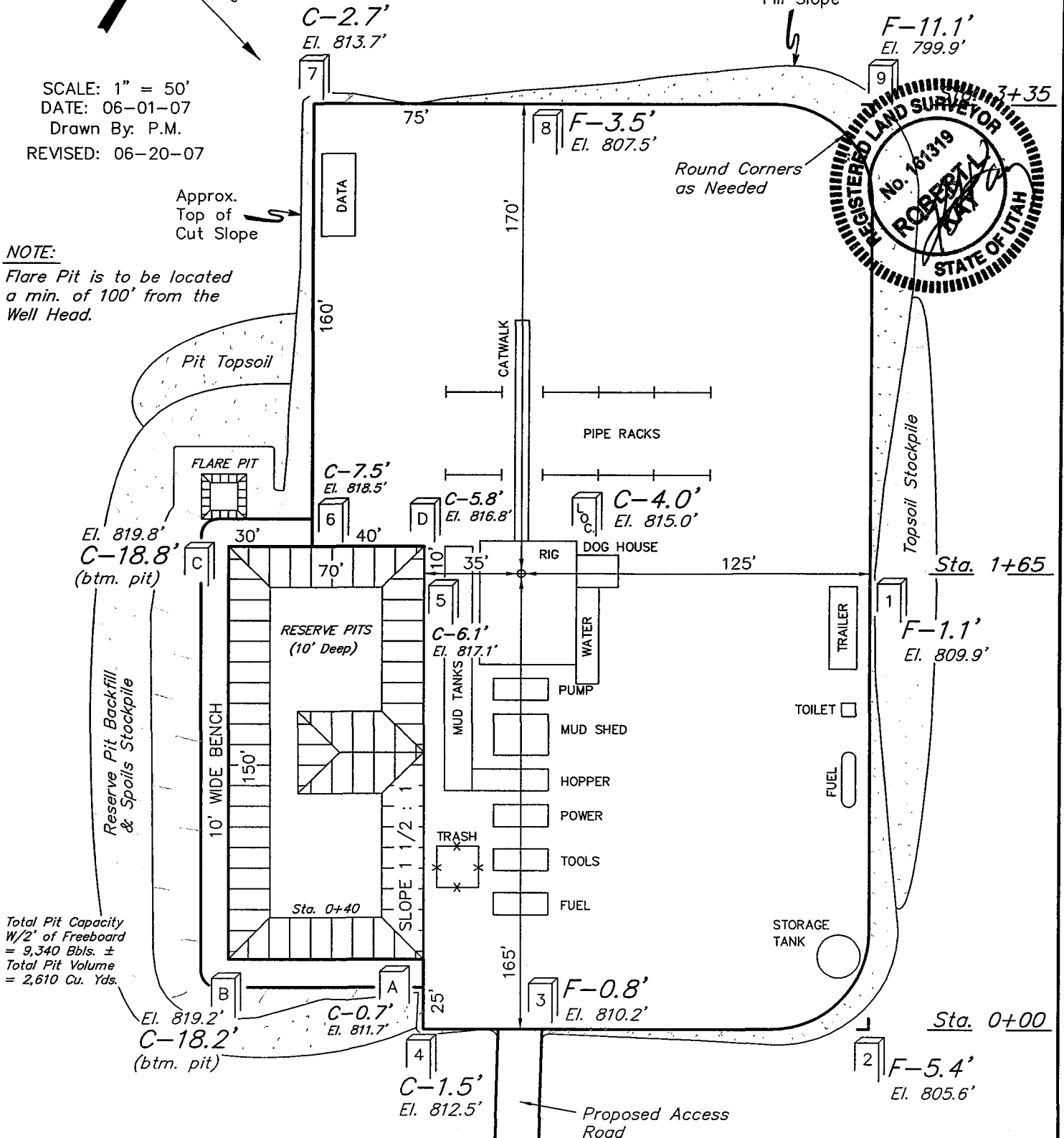
LOCATION LAYOUT FOR  
ARCHY BENCH FEDERAL #12-4  
SECTION 12, T11S, R22E, S.L.B.&M.  
516' FNL 582' FWL



SCALE: 1" = 50'  
DATE: 06-01-07  
Drawn By: P.M.  
REVISED: 06-20-07

## NOTE:

Flare Pit is to be located  
a min. of 100' from the  
Well Head.



Total Pit Capacity  
W/2' of Freeboard  
= 9,340 Bbls. ±  
Total Pit Volume  
= 2,610 Cu. Yds.

Elev. Ungraded Ground At Loc. Stake = 5815.0'  
FINISHED GRADE ELEV. AT LOC. STAKE = 5811.0'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

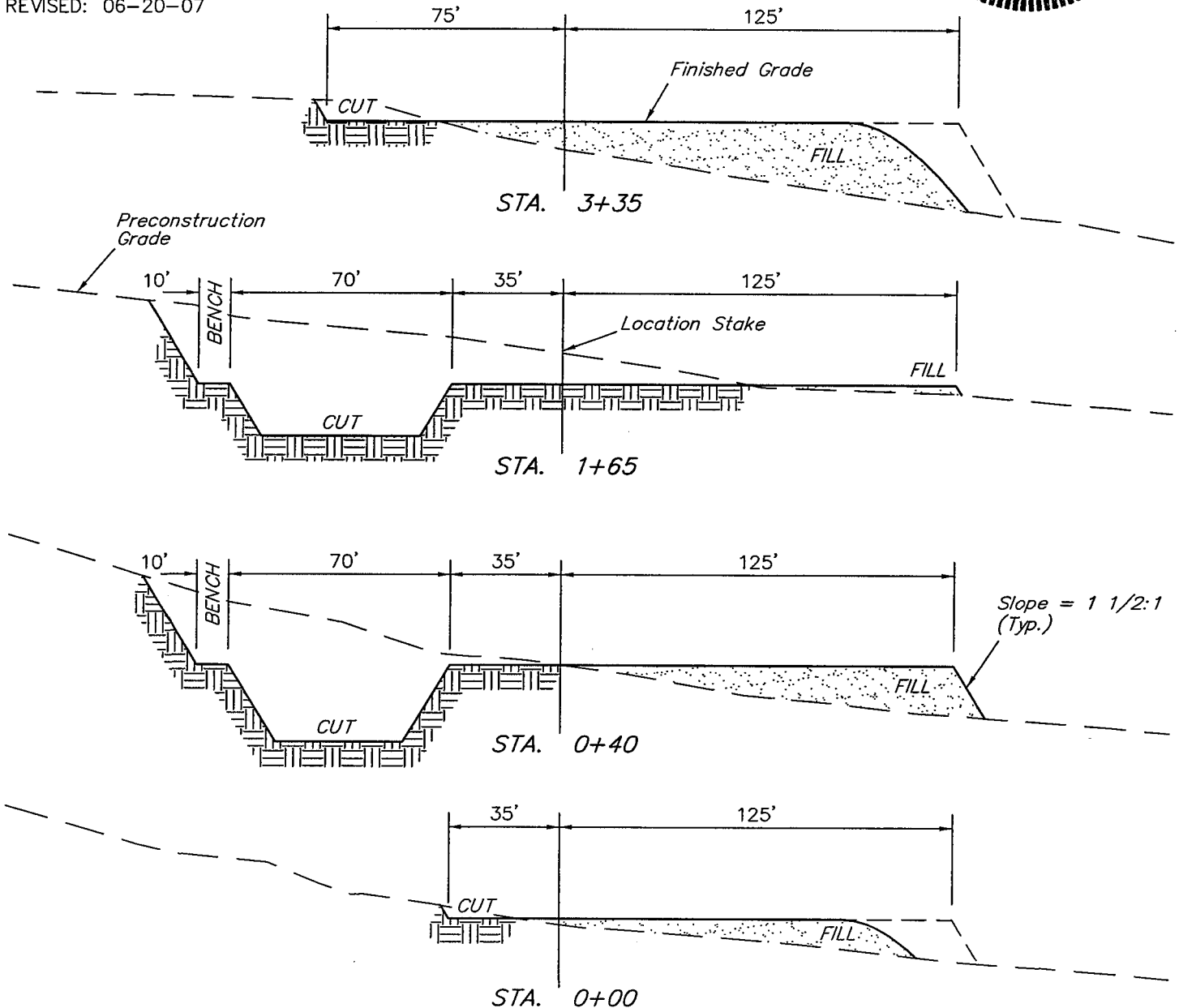
# MC ELVAIN OIL & GAS PROP., INC.

## TYPICAL CROSS SECTIONS FOR ARCHY BENCH FEDERAL #12-4 SECTION 12, T11S, R22E, S.L.B.&M. 516' FNL 582' FWL



1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 06-01-07  
Drawn By: P.M.  
REVISED: 06-20-07



### NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

### \* NOTE:

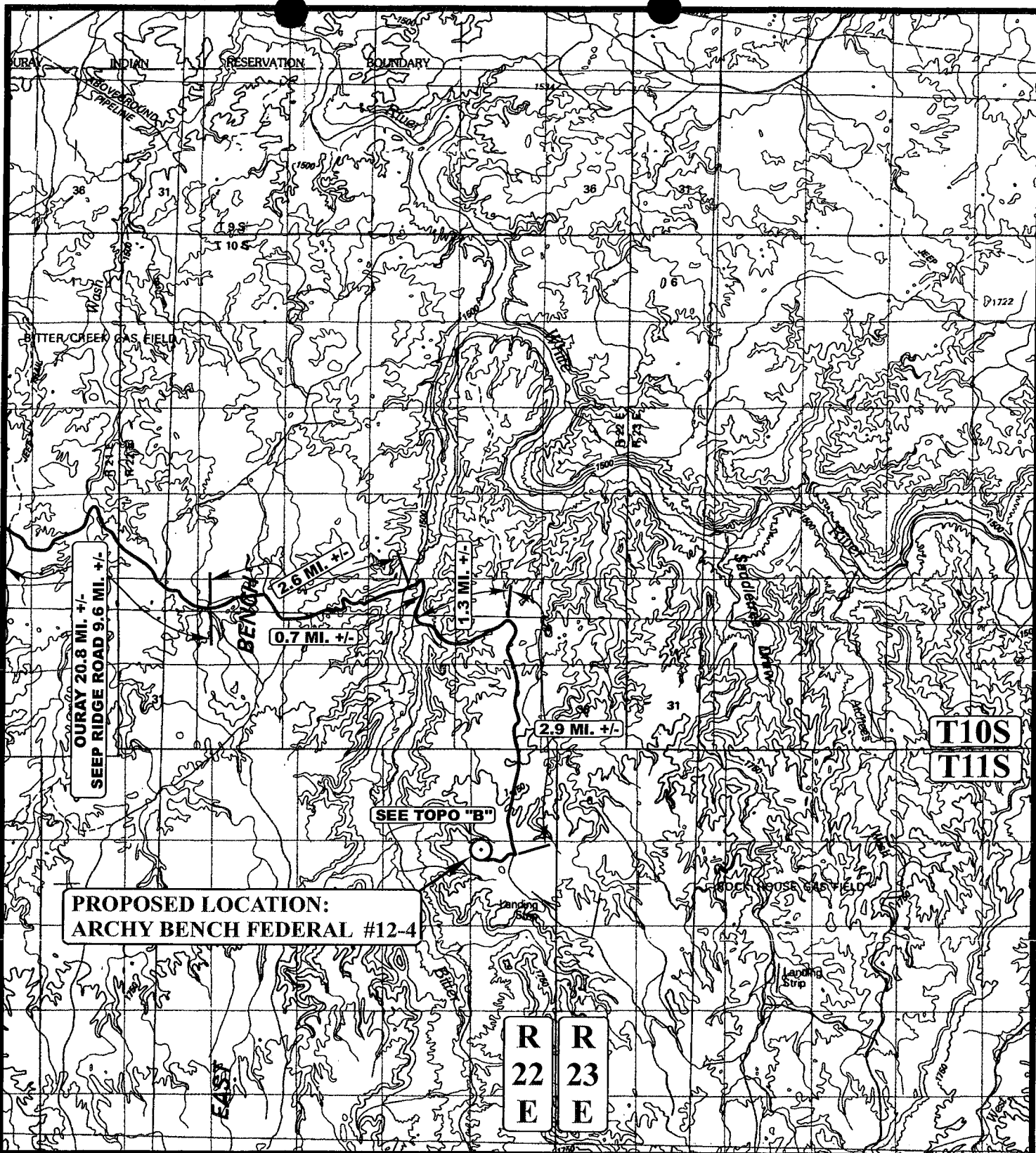
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,590 Cu. Yds.
Remaining Location	= 7,950 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 9,540 CU.YDS.</b>
<b>FILL</b>	<b>= 6,640 CU.YDS.</b>

EXCESS MATERIAL	= 2,900 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,900 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017



**PROPOSED LOCATION:  
ARCHY BENCH FEDERAL #12-4**

**LEGEND:**

○ PROPOSED LOCATION

**McELVAIN OIL & GAS PROP., INC.**

**ARCHY BENCH FEDERAL #12-4  
SECTION 12, T11S, R22E, S.L.B.&M.  
516' FNL 582' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



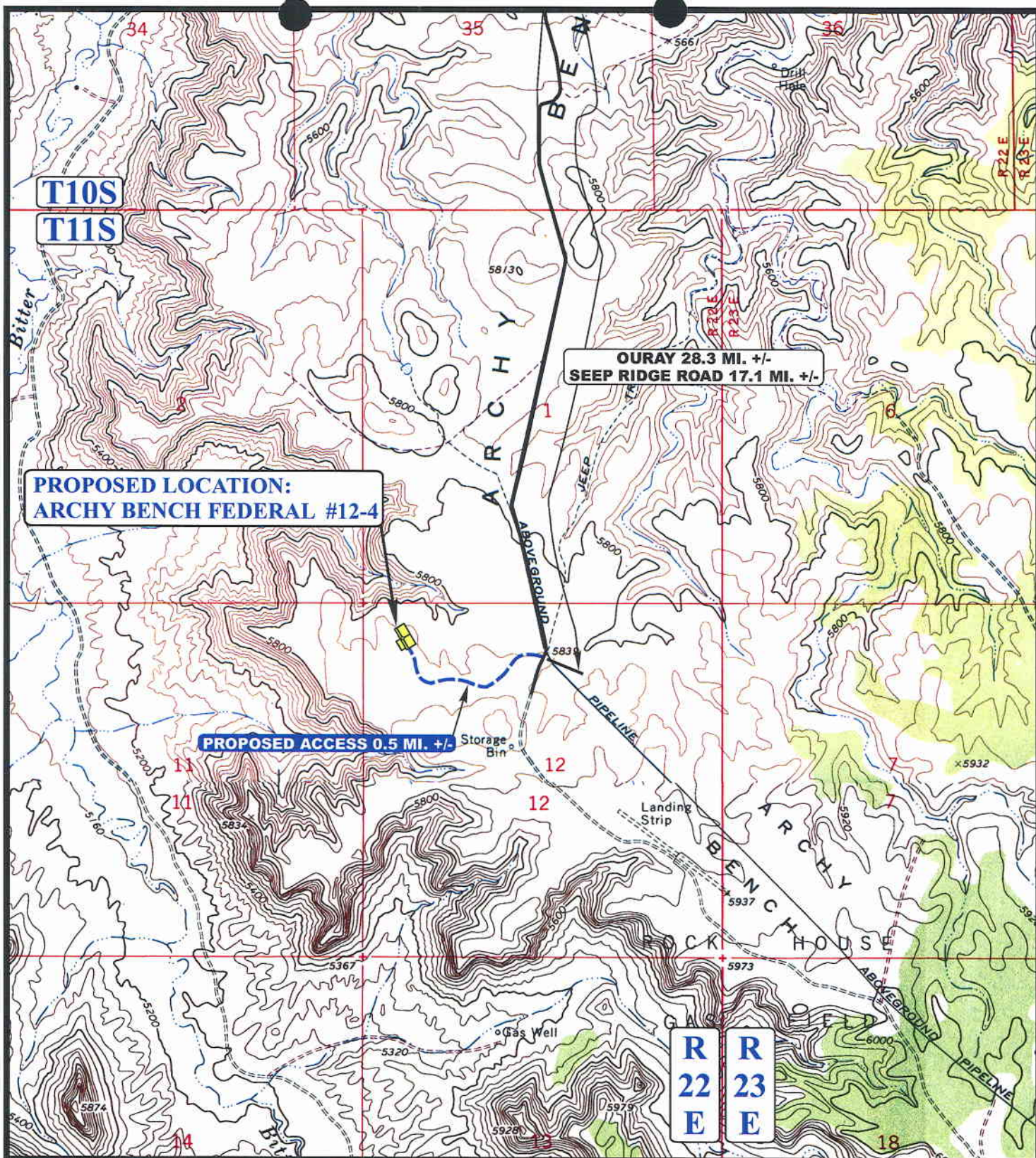
**TOPOGRAPHIC  
MAP**

**05 23 07**  
MONTH DAY YEAR

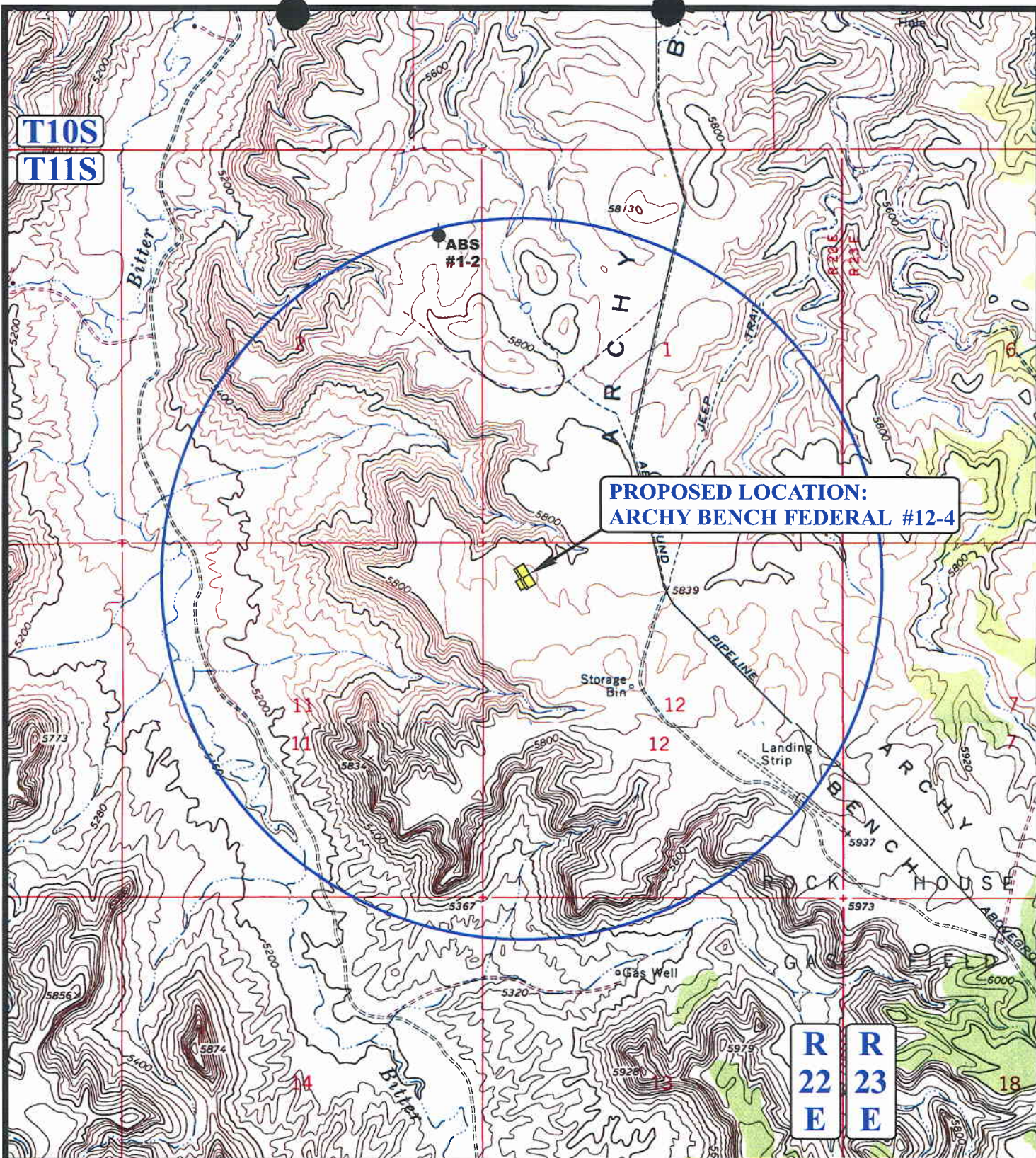
SCALE: 1:100,000 | DRAWN BY: B.C. | REVISED: 00-00-00











**PROPOSED LOCATION:  
ARCHY BENCH FEDERAL #12-4**

# **LEGEND:**

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



**McELVAIN OIL & GAS PROP., INC.**

**ARCHY BENCH FEDERAL #12-4  
SECTION 12, T11S, R22E, S.L.B.&M.  
516' FNL 582' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

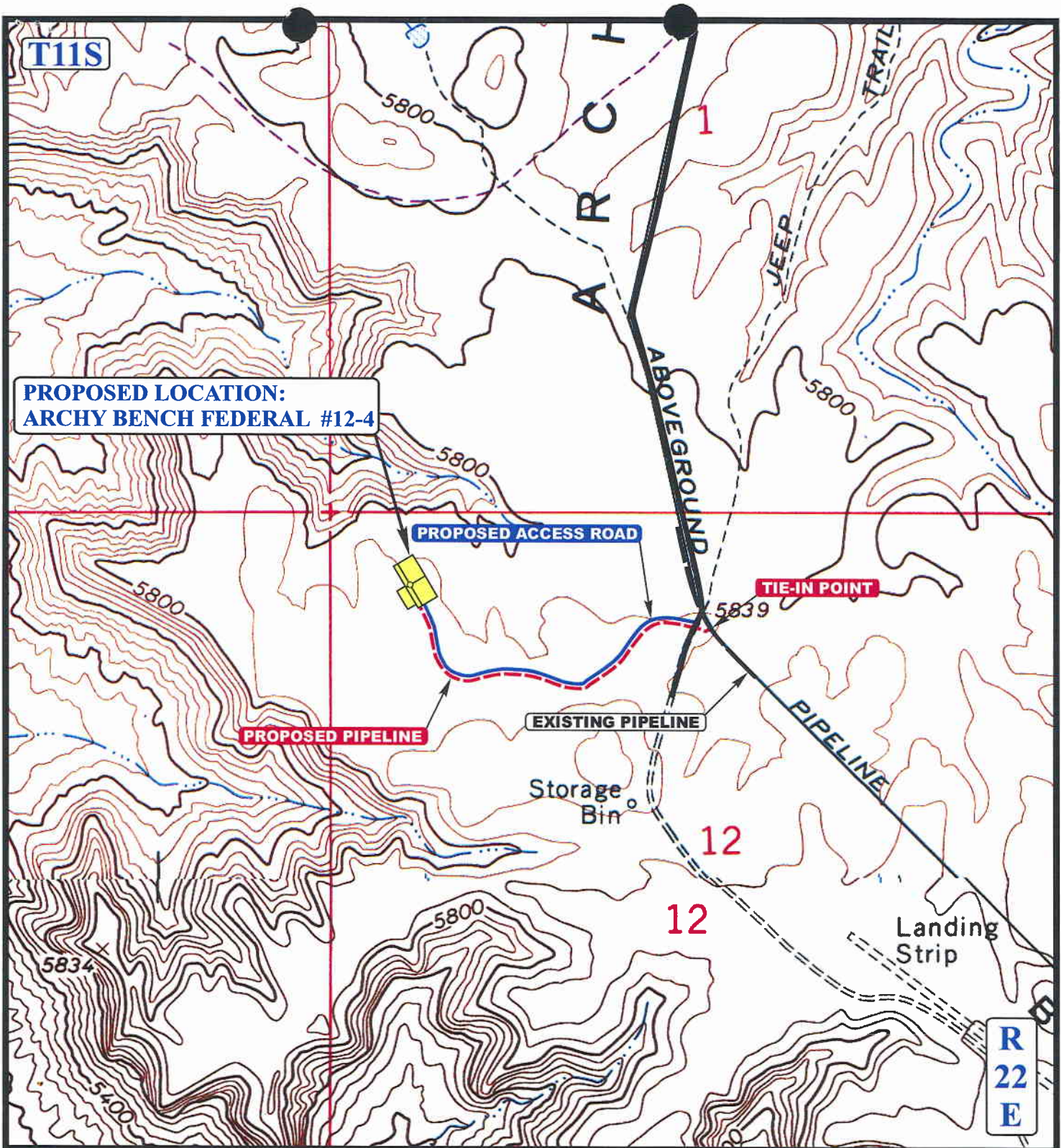
**TOPOGRAPHIC  
MAP**

**05 23 07**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: B.C. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 2,686' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- - - - EXISTING PIPELINE
- - - - PROPOSED PIPELINE
- - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)



**McELVAIN OIL & GAS PROP., INC.**

**ARCHY BENCH FEDERAL #12-4  
SECTION 12, T11S, R22E, S.L.B.&M.  
516' FNL 582' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**05 23 07**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: B.C. REVISED: 00-00-00



**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 10/19/2007

API NO. ASSIGNED: 43-047-39715

WELL NAME: ARCHY BENCH FED 12-4

OPERATOR: MCELVAIN OIL & GAS ( N2100 )

PHONE NUMBER: 303-893-0933

CONTACT: BARBARA MARTIN

**PROPOSED LOCATION:**

NWNW 12 110S 220E

SURFACE: 0516 FNL 0582 FWL

BOTTOM: 0516 FNL 0582 FWL

COUNTY: UINTAH

LATITUDE: 39.88090 LONGITUDE: -109.4101

UTM SURF EASTINGS: 635953 NORTHINGS: 4415538

FIELD NAME: UNDESIGNATED ( 2 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-73903

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

**RECEIVED AND/OR REVIEWED:**

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. COB-000010 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 49-1547 )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

**LOCATION AND SITING:**

       R649-2-3.

Unit: \_\_\_\_\_

       R649-3-2. General

Siting: 460' From Qtr/Qtr & 920' Between Wells

       R649-3-3. Exception

☒ Drilling Unit

Board Cause No: 210-4

Eff Date: 4-12-2004

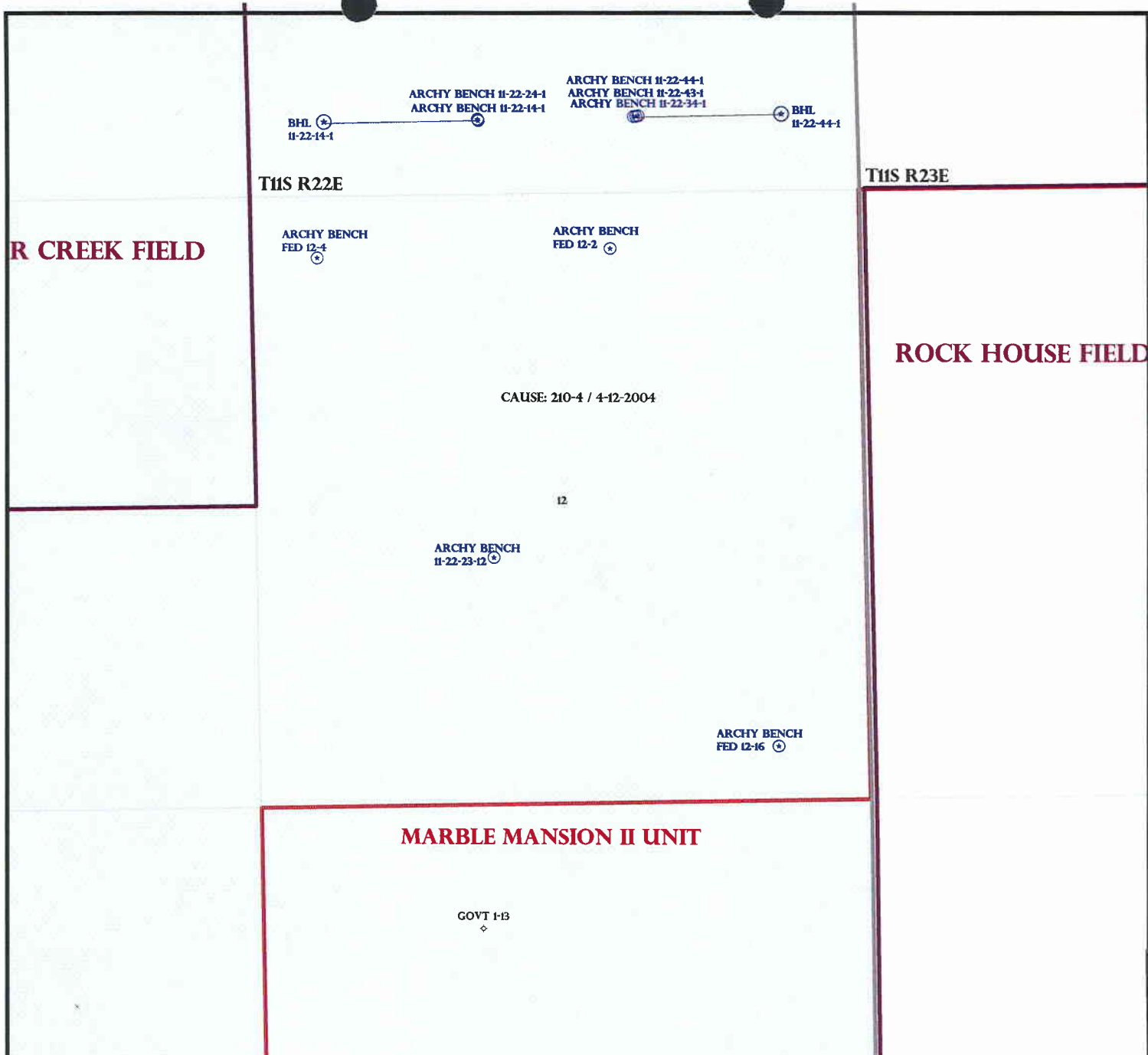
Siting: 460' fr. ext. drl. w. b. g. & 920' fr. other wells

       R649-3-11. Directional Drill

COMMENTS: \_\_\_\_\_

STIPULATIONS: 1- Seismic Approval





OPERATOR: MCELVAIN O&G PROP (N2100)

SEC: 12 T.11S R. 22E

FIELD: UNDESIGNATED (002)

COUNTY: UINTAH

CAUSE: 210-4 / 4-12-2004

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

**Unit Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING



OIL, GAS & MINING



PREPARED BY: DIANA MASON  
DATE: 22-OCTOBER-2007





JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

October 22, 2007

McElvain Oil & Gas Properties, Inc.  
1050 17th St., Ste. 1800  
Denver, CO 80265

Re: Archy Bench Federal 12-4 Well, 516' FNL, 582' FWL, NW NW, Sec. 12, T. 11 South,  
R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39715.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office

**Operator:** McElvain Oil & Gas Properties, Inc.

**Well Name & Number** Archy Bench Federal 12-4

**API Number:** 43-047-39715

**Lease:** UTU-73903

**Location:** NW NW                      **Sec.** 12                      **T.** 11 South                      **R.** 22 East

### **Conditions of Approval**

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**2. Notification Requirements**

Notify the Division with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office      (801) 733-0983 home

**3. Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.**



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

December 10, 2008

McElvain Oil & Gas Properties, Inc.  
1050 17<sup>H</sup> Street, Suite 1800  
Denver, CO 80265

Re: APD Rescinded – Archy Bench Federal 12-4 Sec. 12 T. 11 R. 22E  
Uintah County, Utah API No. 43-047-39715

Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on October 22, 2007. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective December 10, 2008.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

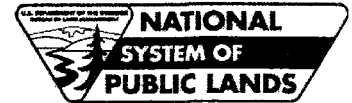
cc: Well File  
Bureau of Land Management, Vernal





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Green River District-Vernal Field Office  
170 South 500 East  
Vernal, UT 84078  
(435) 781-4400 Fax: (435) 781-4410  
<http://www.blm.gov/ut/st/en/fo/vernal.html>



IN REPLY REFER TO:

3160  
UTG011

June 4, 2009

Reed Fischer  
McElvain Oil & Gas Properties, Inc.  
1050 17<sup>th</sup> Street, Suite 1800  
Denver, CO 80265

43 047 39715

Re: Request to Return APD  
Well No. Archy Bench Federal 12-4  
NWNW, Sec. 12, T11S, R22E  
Uintah County, Utah  
Lease No. UTU-73903

Dear Mr. Fischer:

The Application for Permit to Drill (APD) for the above referenced-well received October 19, 2007, is being returned unapproved per your request in an email message to Natural Resource Specialist Holly Villa received on May 5, 2009. If you intend to drill at this location in the future, a new Application for Permit to Drill must be submitted.

If you have any questions regarding APD processing, please contact me at (435) 781-4455.

Sincerely,

*Cindy Severson*

Cindy Severson  
Land Law Examiner

Enclosure

cc: UDOGM

